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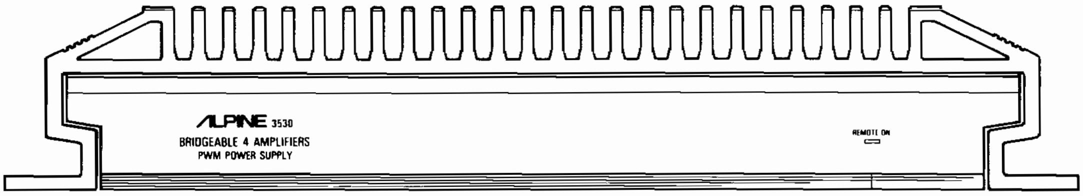
ALPINE SERVICE MANUAL

BRIDGEABLE 4-CHANNEL POWER AMPLIFIER


ALPINE 3530
BRIDGEABLE 4 AMPLIFIERS
PWM POWER SUPPLY
REMOTE ON

3530

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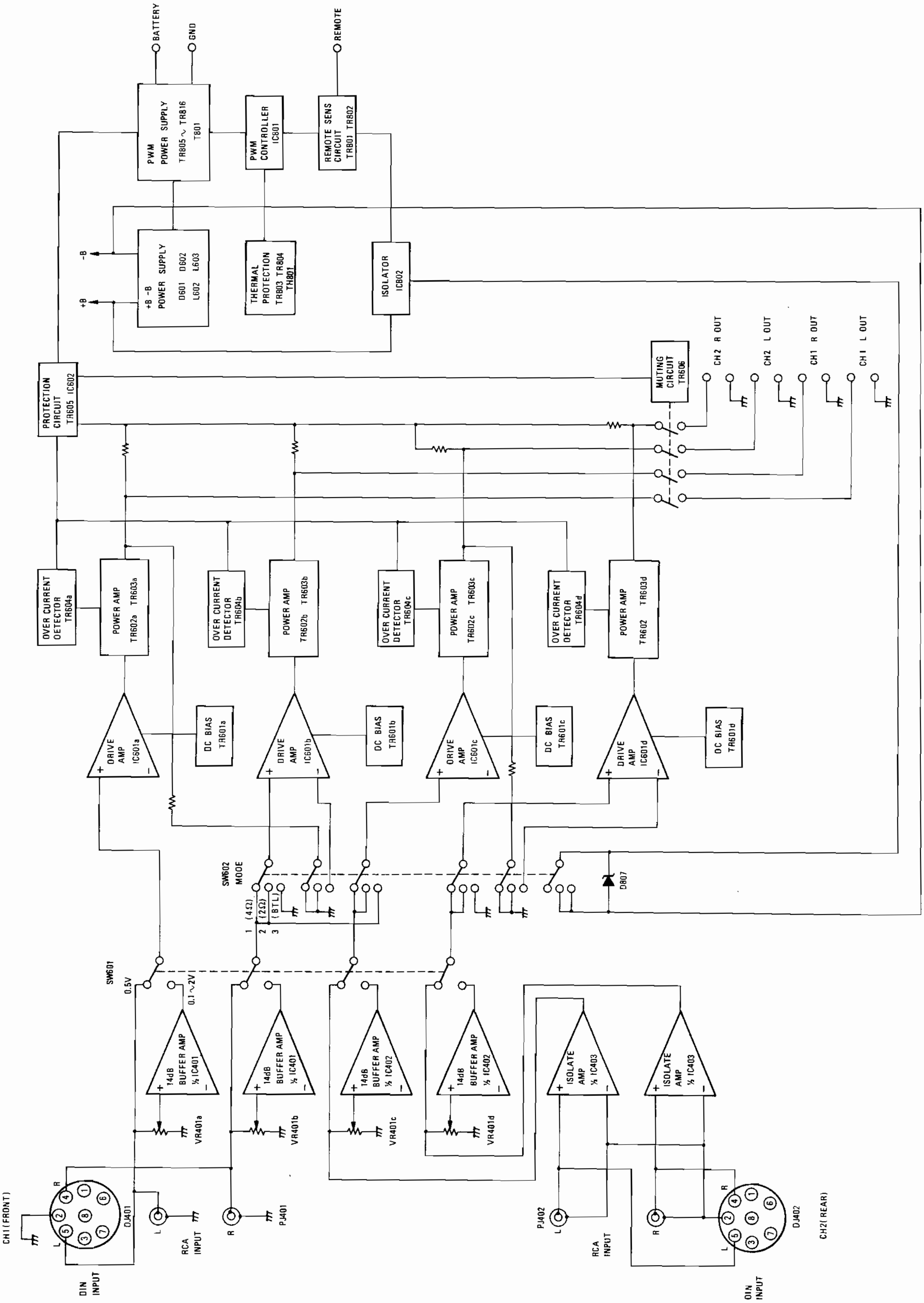
Specifications

Maximum Power Output with four channels driven	
4 ohms load, 0.1% THD at 1 kHz	45 W
4 ohms load, 8% THD at 1 kHz	55 W
2 ohms load, 0.5% THD at 20 – 20 kHz, with 80 kHz LPF	30 W
2 ohms load, 8% THD at 1 kHz	40 W
Maximum Power Output with bridged stage driven	
4 ohms load, 0.5% THD at 1 kHz with 80 kHz LPF	80 W
4 ohms load, 8% THD at 1 kHz	90 W
Frequency Response (at 1 W power output) –3 dB	20 Hz – 70 kHz
Input Sensitivity/Impedance Din Jack	500 mV ± 1 dB/10k ± 2k ohms
RCA Jack	0.1 ~ 2 V ± 2 dB/10k ± 2k ohms
Damping Factor	45
Signal to Noise Ratio (input shorted, IHF-A weighted)	97 dB
Channel Separation at 1 kHz	60 dB
Residual Noise (input shorted)	2 mW
Speaker Impedance	2 and 4 ohms
Power Requirement	DC 14.4 V (11 ~ 16 V allowable)
Semiconductors	69
Dimensions	300(W) x 55(H) x 200(D) mm
Weight	3.3 kg

Block Diagram


BATTERY
GND
REMOTE
PWM POWER SUPPLY TR805～TR816 T801
PWM CONTROLLER IC801
REMOTE SENS CIRCUIT TR801 TR802
-B
+B
+B -B POWER SUPPLY D601 D602 L602 L603
THERMAL PROTECTION TR803 TR804 TH801
ISOLATOR IC802
CH2 R OUT
CH2 L OUT
CH1 R OUT
CH1 L OUT
MUTING CIRCUIT TR606
PROTECTION CIRCUIT TR605 IC602
OVER CURRENT DETECTOR TR604a
POWER AMP TR602a TR603a
OVER CURRENT DETECTOR TR604b
POWER AMP TR602b TR603b
OVER CURRENT DETECTOR TR604c
POWER AMP TR602c TR603c
OVER CURRENT DETECTOR TR604d
POWER AMP TR602 TR603d
DRIVE AMP IC601a
DC BIAS TR601a
DRIVE AMP IC601b
DC BIAS TR601b
DRIVE AMP IC601c
DC BIAS TR601c
DRIVE AMP IC601d
DC BIAS TR601d
SW602 MODE
1 (4Ω)
2 (2Ω)
3 (BTL)
D807
SW601
0.5V
0.1～2V
14dB BUFFER AMP ½ IC401
14dB BUFFER AMP ½ IC401
14dB BUFFER AMP ½ IC402
14dB BUFFER AMP ½ IC402
ISOLATE AMP ½ IC403
ISOLATE AMP ½ IC403
VR401a
VR401b
VR401c
VR401d
CH1 (FRONT)
DJ401
DIN INPUT
RCA INPUT
L
R
PJ401
PJ402
RCA INPUT
DJ402
CH2 (REAR)
DIN INPUT

Parts Locations and Disassembly Instructions

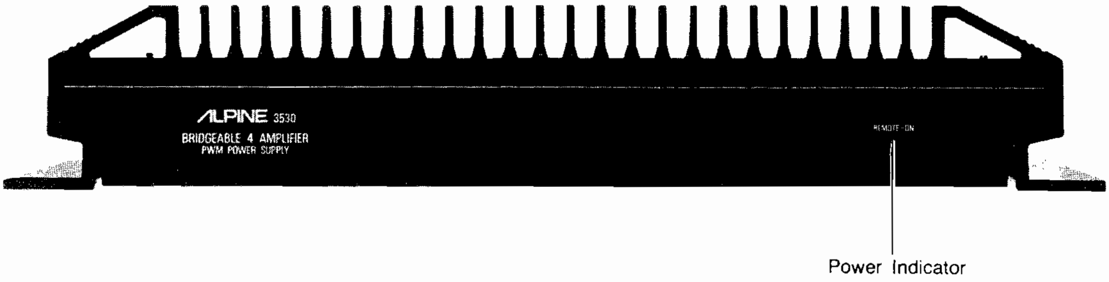

ALPINE 3530
BRIDGEABLE 4 AMPLIFIER
PWM POWER SUPPLY
Power Indicator

Figure 1

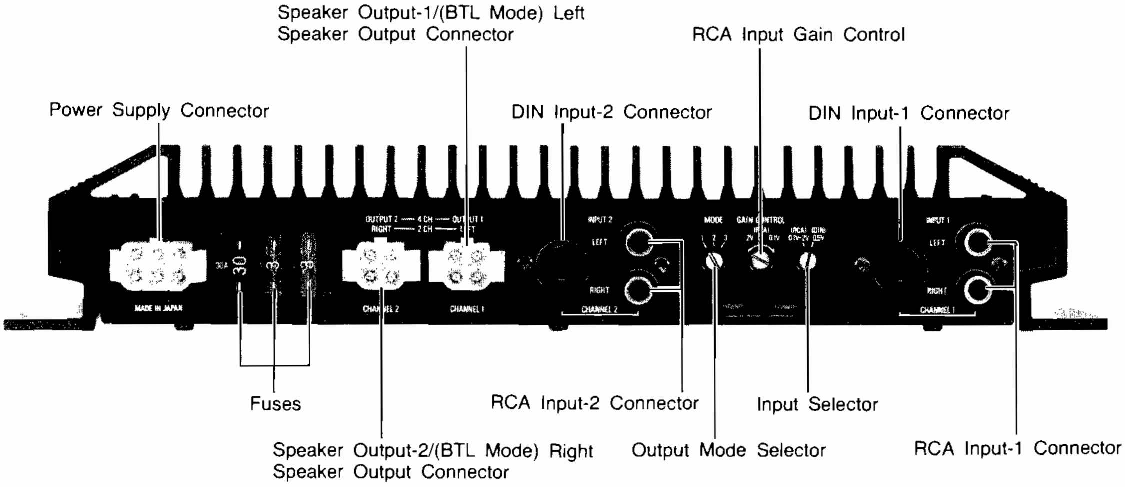

Speaker Output-1/(BTL Mode) Left Speaker Output Connector
RCA Input Gain Control
Power Supply Connector
DIN Input-2 Connector
DIN Input-1 Connector
Fuses
RCA Input-2 Connector
Input Selector
Speaker Output-2/(BTL Mode) Right Speaker Output Connector
Output Mode Selector
RCA Input-1 Connector

Figure 2

1. Removal of Bottom Cover
   (1) Remove five screws marked "○" in Figure 3.
   (2) Remove the Bottom Cover.
2. Removal of Rear Panel
   (1) Remove six screws marked "●" in Figure 4.
   (2) Remove three screws marked "△" in Figure 5.
   (3) Remove CH-1, CH-2 and Fuse P.C. Boards.
   (4) Remove the Rear Panel from three cord assemblies.
3. Removal Main Amp Board
   (1) Remove nine screws marked "□" in Figure 5.
   (2) Remove the Main Amp Board.

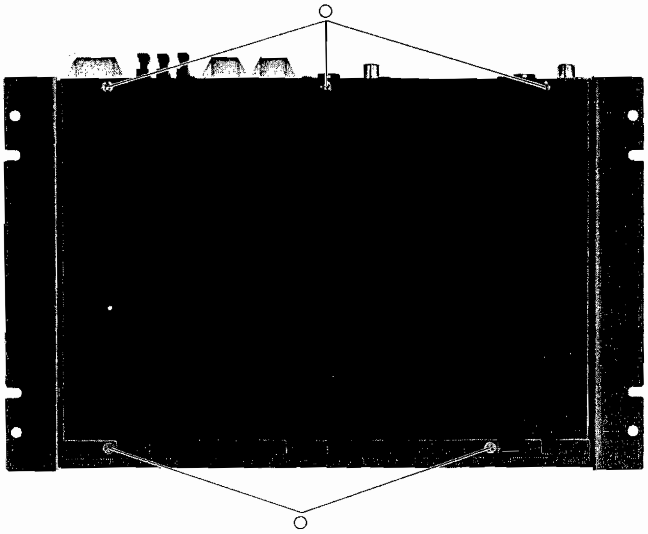


Figure 3

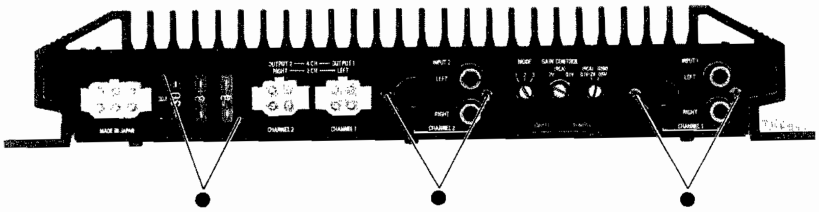


Figure 4

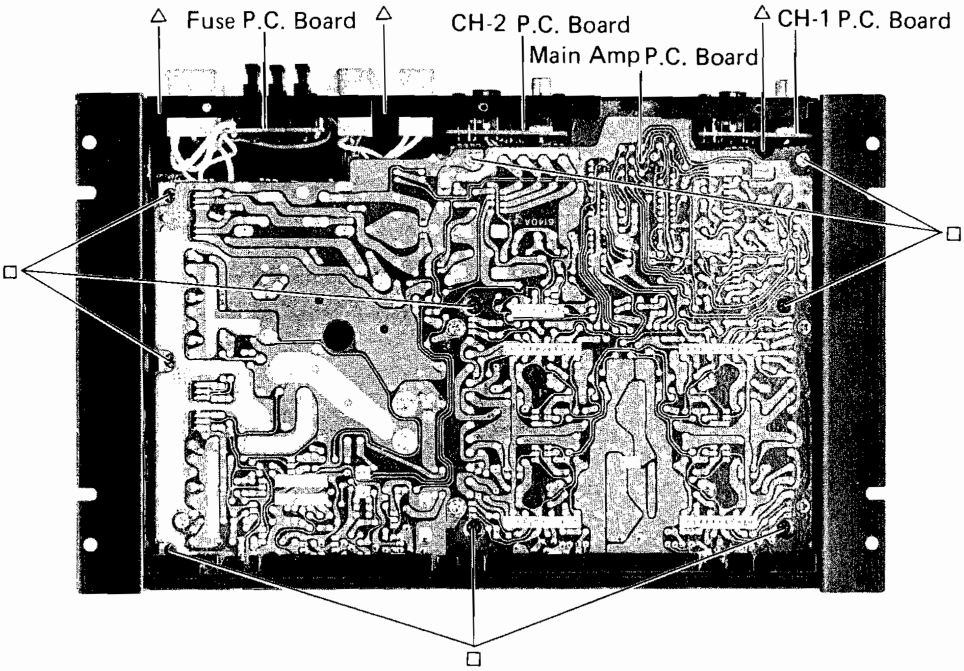
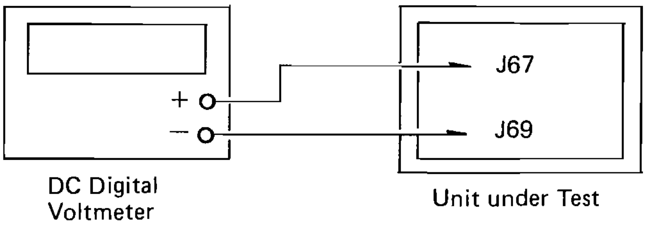

△ Fuse P.C. Board △
CH-2 P.C. Board
Main Amp P.C. Board
△ CH-1 P.C. Board
□
□
□

Figure 5

Adjustment Procedure

POWER SUPPLY SECTION

(1) Connection



+
−
J67
J69
DC Digital Voltmeter
Unit under Test

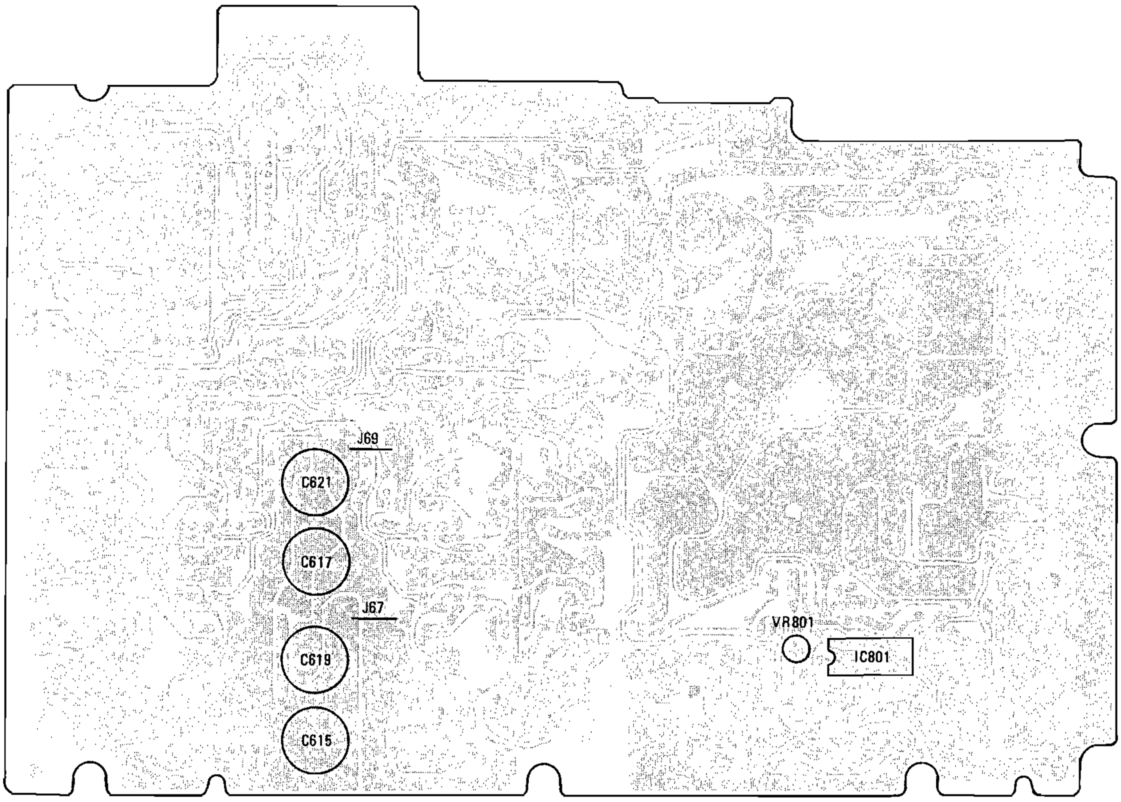
Figure 6

(2) Control Setting
Mode Switch . . . . 1 (4 ohm mode)

(3) Adjustment Procedure

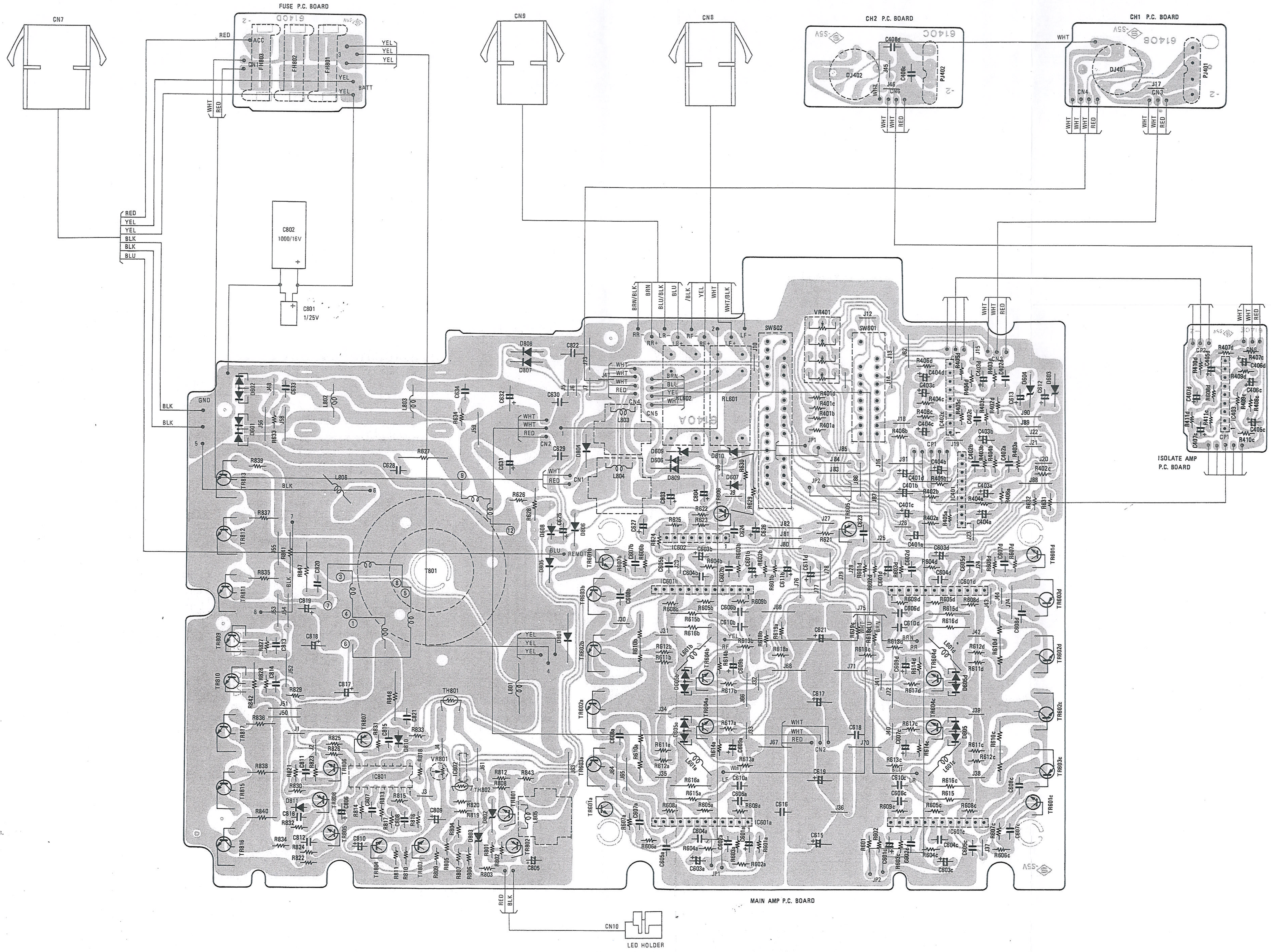
Step	Description	Connection	Condition	Test Point	Remarks
1	Vcc Adjustment	Figure 6	No load	J67, J69	VR801 for 27.0 V

Adjustment Location

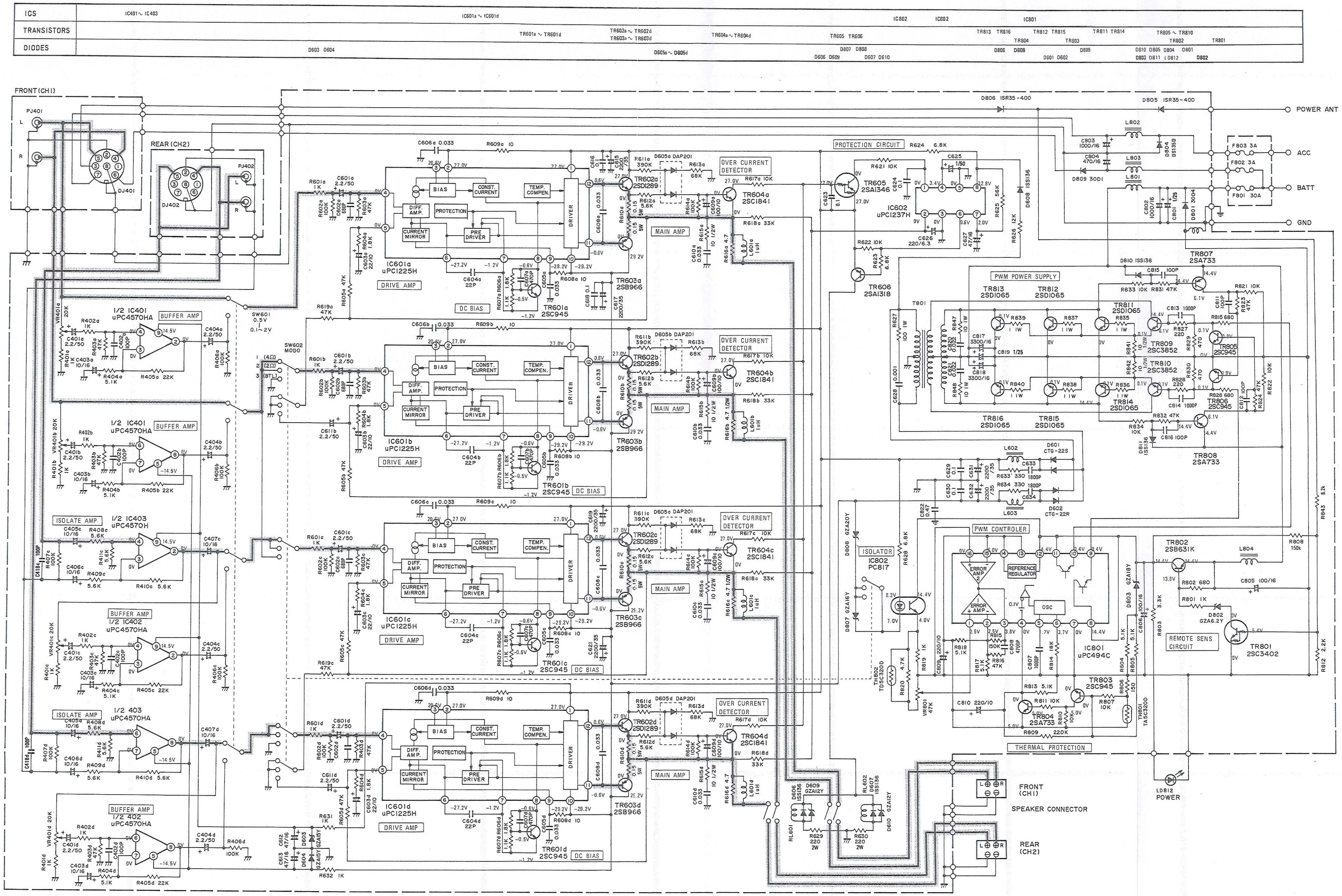


J69
C621
C617
J67
C619
C615
VR801
IC801

Parts Layout on P.C. Boards and Wiring Diagram


FUSE P.C. BOARD
CN7
CN9
CN8
CH2 P.C. BOARD
CH1 P.C. BOARD
FH801
FH802
FH803
ACC
BATT
RED
YEL
WHT
BLK
BLU
BRN
C802
1000/16V
C801
1/25V
DJ401
DJ402
PJ401
PJ402
CN3
CN4
CN5
CN6
ISOLATE AMP P.C. BOARD
SW601
SW602
VR401
RL601
RL602
T801
TH801
IC801
IC601a
IC601b
IC601c
IC601d
IC602
GND
MAIN AMP P.C. BOARD
CN10
LED HOLDER

Schematic Diagram


ICS
TRANSISTORS
DIODES
FRONT (CH1)
REAR (CH2)
PJ401
PJ402
DJ401
DJ402
POWER ANT
ACC
BATT
GND
F801 30A
F802 3A
F803 3A
D805 1SR35-400
D806 1SR35-400
PROTECTION CIRCUIT
TR605 2SA1346
TR606 2SA1318
IC602 uPC1237H
1/2 IC401 uPC4570HA
BUFFER AMP
ISOLATE AMP
1/2 IC403 uPC4570H
1/2 IC402 uPC4570HA
SW601
SW602 MODO
IC601a uPC1225H
IC601b uPC1225H
IC601c uPC1225H
IC601d uPC1225H
DRIVE AMP
DC BIAS
BIAS
CONST. CURRENT
TEMP. COMPEN.
DIFF. AMP.
PROTECTION
CURRENT MIRROR
PRE DRIVER
DRIVER
MAIN AMP
OVER CURRENT DETECTOR
TR601 2SC945
TR602 2SD1289
TR603 2SB966
TR604 2SC1841
D605 DAP201
PWM POWER SUPPLY
T801
TR811 2SD1065
TR812 2SD1065
TR813 2SD1065
TR814 2SD1065
TR815 2SD1065
TR816 2SD1065
TR807 2SA733
TR808 2SA733
TR809 2SC3852
TR810 2SC3852
TR805 2SC945
TR806 2SC945
D601 CTG-22S
D602 CTG-22R
L602
L603
L801
L802
L803
L804
PWM CONTROLER
ERROR AMP
REFERENCE REGULATOR
OSC
IC801 uPC494C
ISOLATOR IC802 PC817
TR802 2SB631K
TR801 2SC3402
D802 GZA6.2Y
REMOTE SENS CIRCUIT
TR803 2SC945
TR804 2SA733
TH801 TA5C320D
TH802 TD5C320D
THERMAL PROTECTION
RL601
RL602
FRONT (CH1)
SPEAKER CONNECTOR
REAR (CH2)
LD812 POWER

NOTES:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = 1/1,000,000
3. DC voltages are measured by a volt meter with 20 kΩ/V input impedance at no signal and no load.

Electrical Parts List

Resistors: Carbon resistors that are less than 1/4 watts are not entered on the parts list, please confirm them by schematic diagram.
uF = microfarads, pF = picofarads

Symbol No.	Part No.	Description
Main Amp P.C. Board		
IC's		
IC401	51E01755S01	μPC4570HA
IC402	51E01755S01	μPC4570HA
IC601a	51T58602F01	μPC1225H
IC601b	51T58602F01	μPC1225H
IC601c	51T58602F01	μPC1225H
IC601d	51T58602F01	μPC1225H
IC602	51T60527F01	μPC1237H
IC801	51T70759F01	μPC494C
IC802	48E01777S01	PC817B
Transistors		
TR601a	48E00237S01	2SC945A
TR601b	48E00237S01	2SC945A
TR601c	48E00237S01	2SC945A
TR601d	48E00237S01	2SC945A
TR602a	48E01776S01	2SD1289
TR602b	48E01776S01	2SD1289
TR602c	48E01776S01	2SD1289
TR602d	48E01776S01	2SD1289
TR603a	48E01773S01	2SB966
TR603b	48E01773S01	2SB966
TR603c	48E01773S01	2SB966
TR603d	48E01773S01	2SB966
TR604a	48E01782S01	2SC1841
TR604b	48E01782S01	2SC1841
TR604c	48E01782S01	2SC1841
TR604d	48E01782S01	2SC1841
TR605	48E01772S01	2SA1346
TR606	48E01771S01	2SA1318
TR801	48E01774S01	2SC3402
TR802	48T61532F01	2SB631K
TR803	48E00237S01	2SC945A
TR804	48T40081T03	2SA733
TR805	48E00237S01	2SC945A
TR806	48E00237S01	2SC945A
TR807	48T40081T03	2SA733
TR808	48T40081T03	2SA733
TR809	48E01775S01	2SC3852
TR810	48E01775S01	2SC3852
TR811	48T47613F03	2SD1065
TR812	48T47613F03	2SD1065
TR813	48T47613F03	2SD1065
TR814	48R47613F03	2SD1065
TR815	48T47613F03	2SD1065
TR816	48T47613F03	2SD1065
Diodes		
D601	48T61597F01	CTG22S
D602	48T61597F02	CTG22R
D603	48E01750S01	Zener, GZA15Y
D604	48E01750S01	Zener, GZA15Y
D605a	48T57042F01	DAP201
D605b	48T57042F01	DAP201
D605c	48T57042F01	DAP201
D605d	48T57042F01	DAP201
D606	48E01184S01	ISS136
D607	48E01184S01	ISS136
D608	48E01184S01	ISS136
D609	48E01749S01	Zener, GZA12Y
D610	48E01749S01	Zener, GZA12Y
D801	48T68079F01	30D4
D802	48E01754S01	Zener, GZA6.2Y
D803	48E01752S01	Zener, GZA18Y
D804	48T44992S01	DS135D
D805	48E01807S01	ISR35-400A
D806	48E01807S01	ISR35-400A
D807	48E01751S01	Zener, GZA16Y
D808	48E01753S01	Zener, GZA20Y
D809	48S40870U01	30D1
D810	48E01184S01	ISS136
D811	48E01184S01	ISS136
Coils & Transformers		
L601a	24E01193S01	Choke Coil, 1μH
L601b	24E01193S01	Choke Coil, 1μH
L601c	24E01193S01	Choke Coil, 1μH
L601d	24E01193S01	Choke Coil, 1μH
L602	24E01783S01	Choke Coil, OWD22
L603	24E01783S01	Choke Coil, OWD22
L801	24E01786S01	Choke Coil, OR25
L802	25C40894G11	Choke Coil, EI19
L803	24E01785S01	Choke Coil, EI16
L804	24E01785S01	Choke Coil, EI16
L806	24E01872S01	Choke Coil, OR22
T801	25E01787S01	Power Transformer
Relays		
RL601	80E01742S01	G5R DC12V
RL602	80E01742S01	G5R DC12V

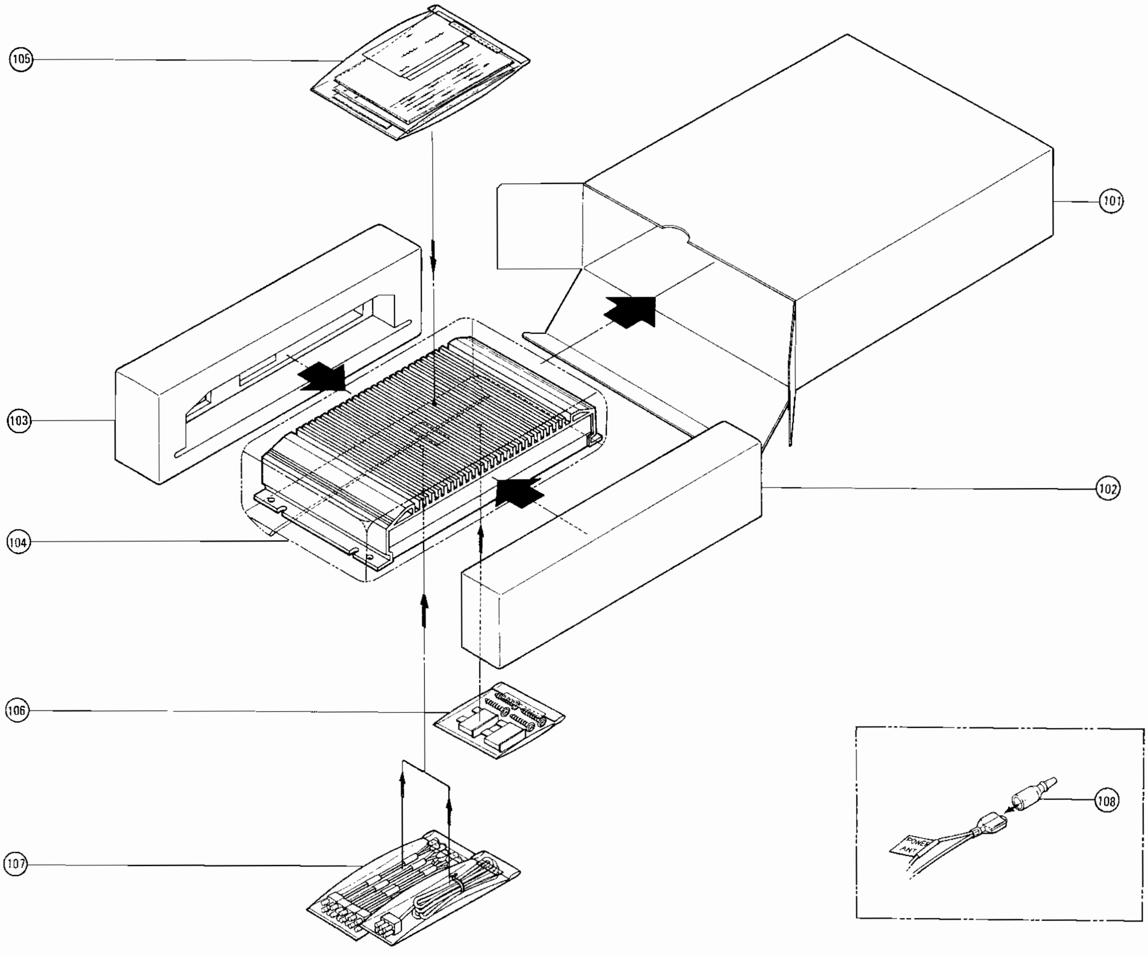
Symbol No.	Part No.	Description		
Switches				
SW601	40E01780S01	Rotary, SRZS4		
SW602	40E01781S01	Rotary, SRZS6		
Thermistors				
TH801	48S52337F32	TD5C320D		
TH802	48S52337F32	TD5C320D		
Capacitors				
C401a	23T43247F06	Electrolytic	2.2μF	50V
C401b	23T43247F06	Electrolytic	2.2μF	50V
C401c	23T43247F06	Electrolytic	2.2μF	50V
C401d	23T43247F06	Electrolytic	2.2μF	50V
C402a	21E01756S01	Ceramic	100pF	50V
C402b	21E01756S01	Ceramic	100pF	50V
C402c	21E01756S01	Ceramic	100pF	50V
C402d	21E01756S01	Ceramic	100pF	50V
C403a	23E10757S01	Electrolytic	10μF	16V
C403b	23E10757S01	Electrolytic	10μF	16V
C403c	23E01757S01	Electrolytic	10μF	16V
C403d	23E01757S01	Electrolytic	10μF	16V
C404a	23T43247F06	Electrolytic	2.2μF	50V
C404b	23T43247F06	Electrolytic	2.2μF	50V
C404c	23R43247F06	Electrolytic	2.2μF	50V
C404d	23T43247F06	Electrolytic	2.2μF	50V
C601a	23T43247F06	Electrolytic	2.2μF	50V
C601b	23T43247F06	Electrolytic	2.2μF	50V
C601c	23T43247F06	Electrolytic	2.2μF	50V
C601d	23T43247F06	Electrolytic	2.2μF	50V
C602a	21E01756S06	Ceramic	680pF	50V
C602b	21E01756S06	Ceramic	680pF	50V
C602c	21E01756S06	Ceramic	680pF	50V
C602d	21E01756S06	Ceramic	680pF	50V
C603a	23E01757S10	Electrolytic	22μF	10V
C603b	23E01757S10	Electrolytic	22μF	10V
C603c	23E01757S10	Electrolytic	22μF	10V
C603d	23E01757S10	Electrolytic	22μF	10V
C604a	21E01756S02	Ceramic	22pF	50V
C604b	21E01756S02	Ceramic	22pF	50V
C604c	21E01756S02	Ceramic	22pF	50V
C604d	21E01756S02	Ceramic	22pF	50V
C605a	08E01759S01	Mylar	0.033μF	50V
C605b	08E01759S01	Mylar	0.033μF	50V
C605c	08E01759S01	Mylar	0.033μF	50V
C605d	08E01759S01	Mylar	0.033μF	50V

Symbol No.	Part No.	Description		
C605a	08E01759S01	Mylar	0.033μF	50V
C606b	08E01759S01	Mylar	0.033μF	50V
C606c	08E01759S01	Mylar	0.033μF	50V
C606d	08E01759S01	Mylar	0.033μF	50V
C607a	21E00252S22	Ceramic	470pF	50V
C607b	21E00252S22	Ceramic	470pF	50V
C607c	21E00252S22	Ceramic	470pF	50V
C607d	21E00252S22	Ceramic	470pF	50V
C608a	08E01759S01	Mylar	0.033μF	50V
C608b	08E01759S01	Mylar	0.033μF	50V
C608c	08E01759S01	Mylar	0.033μF	50V
C608d	08E01759S01	Mylar	0.033μF	50V
C609a	23E00239S21	Electrolytic	100μF	10V
C609b	23E00239S21	Electrolytic	100μF	10V
C609c	23E00239S21	Electrolytic	100μF	10V
C609d	23E00239S21	Electrolytic	100μF	10V
C610a	08E01759S01	Mylar	0.033μF	50V
C610b	08E01759S01	Mylar	0.033μF	50V
C610c	08E01759S01	Mylar	0.033μF	50V
C610d	08E01759S01	Mylar	0.033μF	50V
C611b	23T43247F06	Electrolytic	2.2μF	50V
C611d	23T43247F06	Electrolytic	2.2μF	50V
C612	23E01757S02	Electrolytic	47μF	16V
C613	23E01757S02	Electrolytic	47μF	16V
C615	23E01757S03	Electrolytic	2200μF	35V
C616	08E01759S02	Mylar	0.1μF	50V
C617	23E01757S03	Electrolytic	2200μF	35V
C618	08E01759S02	Mylar	0.1μF	50V
C619	23E01757S03	Electrolytic	2200μF	35V
C621	23E01757S03	Electrolytic	2200μF	35V
C623	21E01756S03	Ceramic	0.1μF	25V
C624	21E01756S03	Ceramic	0.1μF	25V
C625	23E01757S12	Electrolytic	1μF	50V
C626	23E01757S04	Electrolytic	220μF	6.3V
C627	23S40657F13	Electrolytic	47μF	16V
C628	08E01759S03	Mylar	1000pF	100V
C629	08E01759S02	Mylar	0.1μF	50V
C630	08E01759S02	Mylar	0.1μF	50V
C631	23E01757S03	Electrolytic	2200μF	35V
C632	23E01757S03	Electrolytic	2200μF	35V
C633	21E01756S04	Ceramic	1800pF	50V
C634	21E01756S04	Ceramic	1800pF	50V
C803	23E01757S06	Electrolytic	1000μF	16V
C804	23E00239S19	Electrolytic	470μF	16V
C805	23S40657F14	Electrolytic	100μF	16V
C806	23S40657F14	Electrolytic	100μF	16V

Symbol No.	Part No.	Description
C807	08E01759S04	Mylar 1000pF 50V
C808	08E01759S06	Mylar 4700pF 50V
C809	23E01757S07	Electrolytic 220μF 10V
C810	23E01757S07	Electrolytic 220μF 10V
C811	21E01756S01	Ceramic 100pF 50V
C812	21E01756S01	Ceramic 100pF 50V
C813	21E01756S05	Ceramic 1000pF 50V
C814	21E01756S05	Ceramic 1000pF 50V
C815	21E01756S01	Ceramic 100pF 50V
C816	21E01756S01	Ceramic 100pF 50V
C817	23E01757S08	Electrolytic 3300μF 16V
C818	23E01757S08	Electrolytic 3300μF 16V
C819	08E01791S01	OS 1μF 25V
C820	08E01759S05	Mylar 0.022μF 100V
C821	08E01759S05	Mylar 0.022μF 100V
C822	08E01759S07	TF 0.047μF 50V
Resistors		
VR401	18E01778S01	Variable 20k ohm B x 4
VR801	18E01779S01	Semi-Variable 47k ohm
R610a	09E01758S01	Plate 0.15 ohm x 2 5W
R610b	09E01758S01	Plate 0.15 ohm x 2 5W
R610c	09E01758S01	Plate 0.15 ohm x 2 5W
R610d	09E01758S01	Plate 0.15 ohm x 2 5W
R615a	06E01788S01	Fail Safe 10 ohm 1/2W
R615b	06E01788S01	Fail Safe 10 ohm 1/2W
R615c	06E01788S01	Fail Safe 10 ohm 1/2W
R615d	06E01788S01	Fail Safe 10 ohm 1/2W
R616a	06E01788S02	Fail Safe 4.7 ohm 1/2W
R616b	06E01788S02	Fail Safe 4.7 ohm 1/2W
R616c	06E01788S02	Fail Safe 4.7 ohm 1/2W
R616d	06E01788S02	Fail Safe 4.7 ohm 1/2W
R627	06E01789S01	Metal Oxide 100 ohm 1W
R629	06E01789S02	Metal Oxide 220 ohm 2W
R630	06E01789S02	Metal Oxide 220 ohm 2W
R835	06E01789S03	Metal Oxide 1 ohm 1W
R836	06E01789S03	Metal Oxide 1 ohm 1W
R837	06E01789S03	Metal Oxide 1 ohm 1W
R838	06E01789S03	Metal Oxide 1 ohm 1W
R839	06E01789S03	Metal Oxide 1 ohm 1W
R840	06E01789S03	Metal Oxide 1 ohm 1W
R841	06E01788S01	Fail Safe 10 ohm 1/2W
R842	06E01788S01	Fail Safe 10 ohm 1/2W
R847	06E01789S03	Metal Oxide 10 ohm 1W

Symbol No.	Part No.	Description
R848	06E01789S03	Metal Oxide 10 ohm 1W
Isolate Amp P.C. Board		
IC		
IC403	51E01755S01	μPC4570HA
Capacitors		
C405c	23E01757S09	Electrolytic 10μF 16V
C405d	23E01757S09	Electrolytic 10μF 16V
C406c	23E01757S09	Electrolytic 10μF 16V
C406d	23E01757S09	Electrolytic 10μF 16V
C407c	23E01757S09	Electrolytic 10μF 16V
C407d	23E01757S09	Electrolytic 10μF 16V
C408c	21E01756S01	Ceramic 100pF 50V
C408d	21E01756S01	Ceramic 100pF 50V
Miscellaneous Parts		
LD812	48E00356S01	LED, SLP-151B
F801	65T58596F08	Auto Fuse, 30A
F802	65T58596F01	Auto Fuse, 3A
F803	65T58596F01	Auto Fuse, 3A
DJ401	09E01201S01	8P Din Jack
DJ402	09E01201S01	8P Din Jack
PJ401	09E01200S02	2P Pin Jack
PJ402	09E01200S02	2P Pin Jack
CN7	01E01739S01	6P Cord Ass'y
CN8	01E01740S01	4P Cord Ass'y (A)
CN9	01E01741S01	4P Cord Ass'y (B)
CN10	01E01218S01	2P Cord Ass'y
CP1	01E01790S01	M-W Connector, 5P
CP2	01E01790S02	M-W Connector, 3P
C801	08E01791S01	OS Cap. 1μF 25V
C802	23E01757S06	Electrolytic Cap. 1000μF 16V

Packing Method View



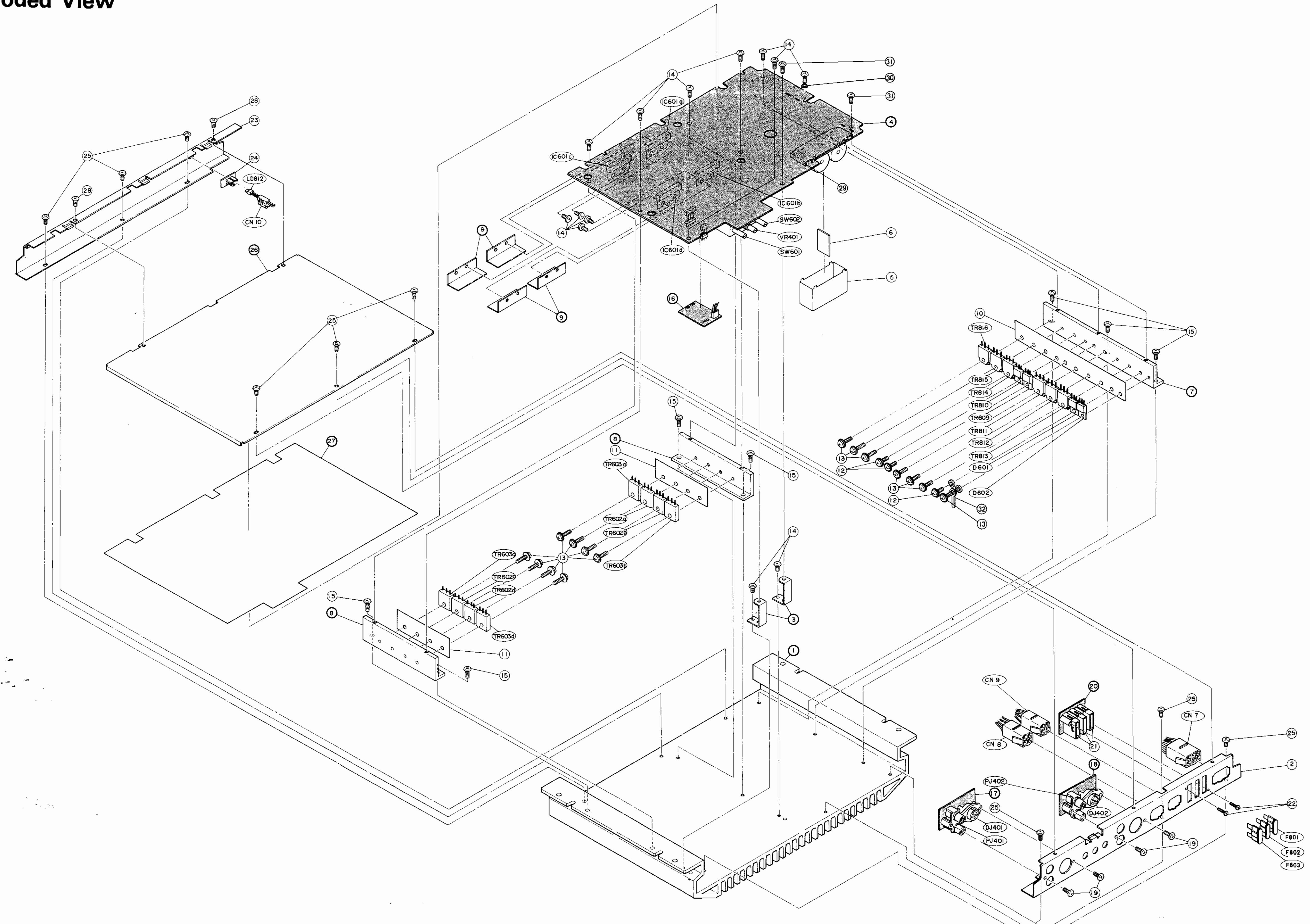
Packing Assembly Parts List

Symbol No.	Part No.	Description
☐101	56E01745S01	Carton, Packing (Individual)
Δ101	56E01881S01	Carton, Packing (Individual)
102	56E01746S01	Tray, Packing (Front)
103	56E01747S01	Tray, Packing (Rear)
104	56E01803S01	Package Bag
☐105	01E01225S01	Assembly, Pamphlet
Δ105	68P66888F67	Owner's Manual
106	01E01222S01	Assembly Kit Installation
107	01E01748S01	Assembly, Kit Wire
108	14E01806S02	Insulator

Symbol No.	Part No.	Description

Note: ☐ : For North America Model only (A0)
Δ : For General Export Model only (G0)
: Others common

Exploded View


28
23
25
24
LD812
28
CN10
26
25
27
9
9
14
IC601a
IC601c
IC601b
IC601d
SW602
VR401
SW601
16
14
31
30
31
4
29
6
5
10
TR816
15
7
TR815
TR814
TR810
TR809
TR811
TR812
TR813
D601
D602
32
13
12
13
12
13
15
8
11
TR603a
15
TR602a
TR602b
TR603b
13
TR603c
TR602c
TR602d
TR603d
15
8
11
15
14
3
1
CN9
20
CN8
21
25
CN7
25
2
18
PJ402
17
DJ402
25
DJ401
PJ401
22
19
19
F801
F802
F803

Cabinet Assembly Parts List

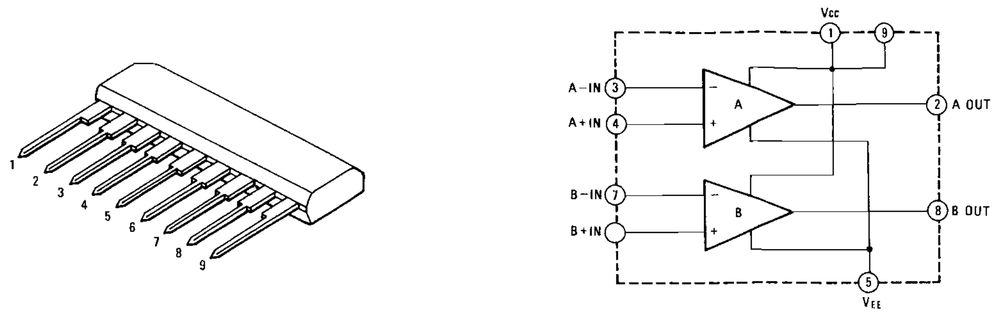
Symbol No.	Index	Part No.	Description
2	4C	15E01744S01	Panel, Rear
5	2E	15E01794S01	Case, Shield
6	2E	75E01795S01	Cushion
10	3E	14E01793S01	Cool Sheet (A)
11	3C,4C	14E01793S02	Cool Sheet (B)
12	3D,3E	03E01797S01	Pan Screw Sems-F Tite-B 3x10
13	3E,4C	03E00214S43	Pan Screw Sems-F Tite-B 3x12
14	1D,2C	03E01798S01	Bind Screw Tite-B 3x6
15	4B,4C 3D,3F	03E01798S02	Bind Screw Tite-B 3x8
19	5F	03E01798S03	Bind Screw Tite-B 3x8 Boss (BLK)
21	4F	15E01199S01	Holder, Fuse
22	5F	03E01799S01	Plax Screw 2x8 (BLK)
23	2B	64E01743S01	Panel, Front
24	2B	15E01180S01	Holder, LED
25	2A,3B 4F,5E	03E00214S23	Bind Screw Tite-B 3x6 (BLK)
28	2A,2B	03E00214S46	Flat Screw 3x6 (BLK)
29	2E	15E01800S01	Cover, Shield
30	1E	04E01801S01	Washer, Fiber
31	1E,2E	03E01798S04	Bind Screw Tite-B 3x6 Sn
32	3E	42E01802S01	Clip

Symbol No.	Index	Part No.	Description

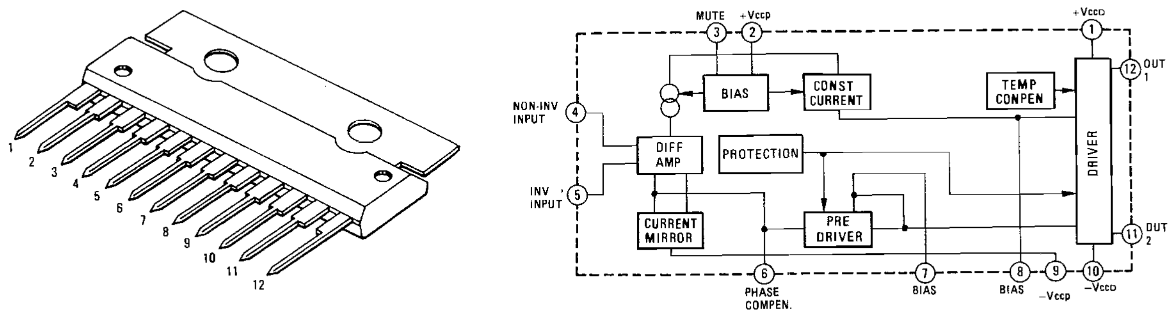
Note: The parts whose parts numbers are not entered will not be supplied.

Semiconductors Lead Identifications

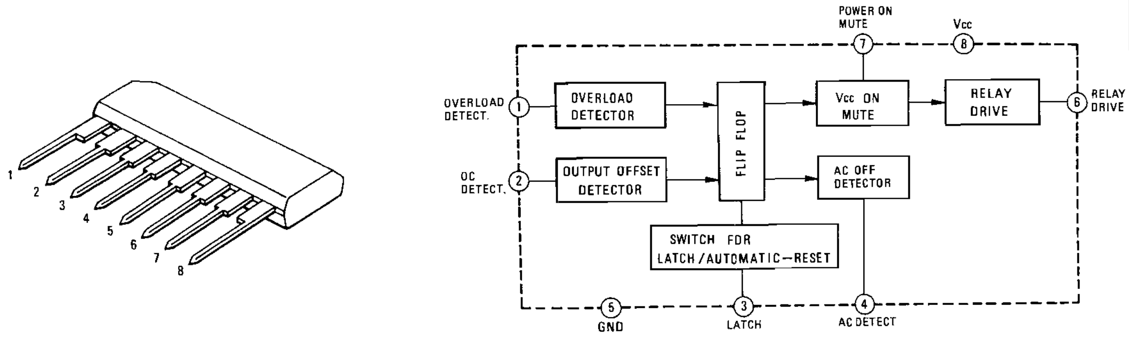
μPC4570HA : IC401 ∼ IC403


Vcc
A−IN
A+IN
B−IN
B+IN
A
B
A OUT
B OUT
VEE
1
2
3
4
5
6
7
8
9

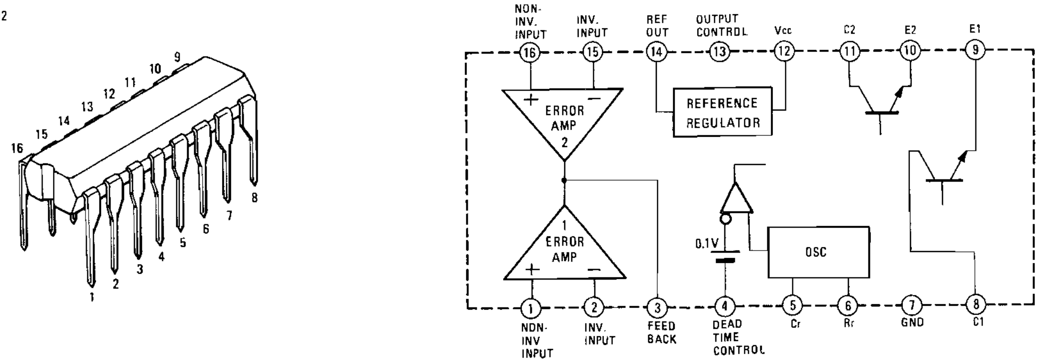
μPC1225H : IC601a ∼ IC601d


MUTE
+Vccp
+Vcco
NON-INV INPUT
INV INPUT
BIAS
CONST CURRENT
TEMP CONPEN
DIFF AMP
PROTECTION
CURRENT MIRROR
PRE DRIVER
DRIVER
OUT 1
OUT 2
PHASE COMPEN.
BIAS
BIAS
−Vccp
−Vcco
1
2
3
4
5
6
7
8
9
10
11
12

μPC1237H : IC602


POWER ON MUTE
Vcc
OVERLOAD DETECT.
DC DETECT.
OVERLOAD DETECTOR
OUTPUT OFFSET DETECTOR
FLIP FLOP
Vcc ON MUTE
AC OFF DETECTOR
RELAY DRIVE
RELAY DRIVE
SWITCH FOR LATCH/AUTOMATIC—RESET
GND
LATCH
AC DETECT
1
2
3
4
5
6
7
8

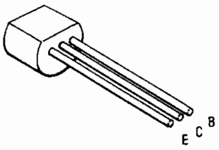
μPC494C : IC802


NON-INV. INPUT
INV. INPUT
REF OUT
OUTPUT CONTROL
Vcc
C2
E2
E1
ERROR AMP 2
REFERENCE REGULATOR
ERROR AMP 1
0.1V
OSC
NON-INV INPUT
INV. INPUT
FEED BACK
DEAD TIME CONTROL
Ct
Rt
GND
C1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

2SC945A : TR601a ∿ TR601d TR803 TR805 TR806

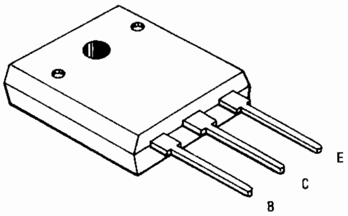
2SC1841 : TR604a ∿ TR604d

2SA733 : TR804 TR807 TR808



2SD1289 : TR602a ∿ TR602d

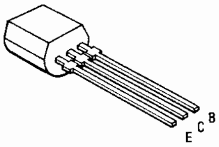
2SC966 : TR603a ∿ TR603d



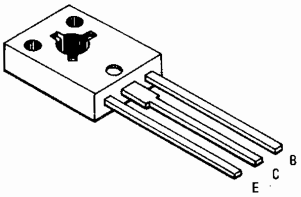
2SA1318 : TR606

2SC3402 : TR801

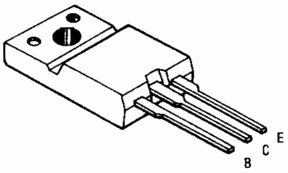
2SA1346 : TR605



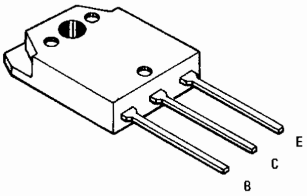
2SB631K : TR802



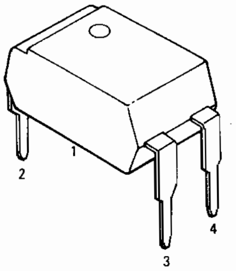
2SC3852 : TR809 TR810

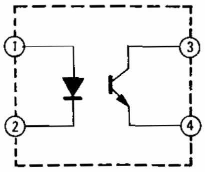


2SD1065 : TR811 ∿ TR816



PC817B : IC802





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